

Fact Sheet
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Hazardous Waste Generator Requirements for Jewelry Mart Operators



JEWELRY MANUFACTURING INDUSTRY

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Departments within
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Environmental
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DTSC's mission is
to restore, protect
and enhance the
environment, to
ensure public health,
environmental
quality and
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by regulating
hazardous waste,
conducting and
overseeing cleanups,
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promoting pollution
prevention.***

State of California



California
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Introduction

Many jewelry manufacturing processes, such as casting, plating, and polishing generate hazardous waste. Business owners and operators are legally and financially responsible for properly handling their hazardous waste. This fact sheet will provide an overview of the hazardous waste generator requirements for jewelry mart operators. This fact sheet does not replace or supersede relevant statutes and regulations.

How do I know if I generate a waste?

When you discard your processing materials from your jewelry manufacturing business, you have generated a waste. For example, when you are finished with your jewelry manufacturing processes and cannot use your process solutions any longer, clean your equipment to make it work better, or when you decide you cannot use something in your jewelry manufacturing business any longer, you have generated a waste [1].

Am I a hazardous waste generator?

You are a generator of hazardous waste if your business activities produce any amount of any waste that is defined as hazardous waste in the California Code of Regulations [2].

Is my waste hazardous?

Each generator must determine if the waste is hazardous. Waste can be hazardous for the following reasons [3]:

- The waste contains toxic substances such as poisons that can damage human health. Examples are cyanide, and many metals, such as silver, copper, zinc, lead, mercury, and arsenic.
- The waste is prone to spontaneous combustion (ignitable). Examples are acetone, varnish, and paint removers.
- The waste could react violently, such as explode or produce harmful fumes, when exposed to heat, air, water, or shock (reactive). An example is mixing cyanide-containing waste with acid or acid-containing waste, which can release poisonous hydrogen-cyanide gas.
- The waste corrodes or eats away material or skin (corrosive). Examples are battery acid and acids used in etching.

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our web site at www.dtsc.ca.gov.

How can I determine if my waste is hazardous?

You can determine if your waste is hazardous through laboratory testing or by using your knowledge of the process that generated the waste [4]. Material Safety Data Sheets (MSDS) may help you determine if your waste is hazardous. Request an MSDS whenever you purchase a product.

What are some of the jewelry manufacturing processes that generate hazardous waste?

Cyanide, in the form of sodium and potassium cyanide, is used in electroplating, "cyanide bombing" and metal stripping. These processes typically produce spent process baths that are hazardous waste because they contain cyanide, as well as metals. Cyanide is considered highly toxic because it is a strong poison (see the Department of Toxic Substances Control fact sheet, "[Cyanide Waste Produced in Jewelry Manufacturing](#)").

Spent rinse waters may be hazardous because they can be corrosive. The rinse waters may also contain cyanide and dissolved precious metals such as gold, silver, platinum, and rhodium. Dissolved metals are also harmful to human health and the environment.

Soldering may also generate hazardous waste. Gold and silver solders are used frequently in jewelry manufacturing, and these metals can be harmful. Cadmium is also common in many solders, although cadmium content will not always be indicated on the solder ingredients. Solders containing cadmium will release cadmium vapors during use. Cadmium may cause cancer and workers should avoid breathing vapors from solders that contain cadmium.

What precautions should I take to safely handle my hazardous waste?

The California Occupational Safety and Health Administration (Cal/OSHA) requires people to use safety precautions while they are handling hazardous materials and waste. The appropriate safety precautions depend on the type of hazardous waste you generate. For specific guidance you should contact Cal/OSHA at 1-800-963-9424.

No one should eat, drink, or smoke in areas where hazardous waste is stored or treated.

Cyanide-containing and acidic hazardous wastes are incompatible, and must be stored in separate areas or separated by a wall or other suitable barrier capable of preventing mixing in the event of a spill [5]. Separation is necessary because mixing cyanide or cyanide-containing hazardous waste with acid or acid-containing hazardous waste may release hydrogen cyanide gas. A few breaths of hydrogen cyanide gas will kill a person in minutes. A dust mask will not provide protection against hydrogen cyanide gas.

Clean up all spills immediately, whether from your jewelry manufacturing process or from stored hazardous waste [6]. Handle your hazardous waste in a way that prevents leaks, spills, fires, and explosions [7].

Do I need a Generator Identification Number?

Yes, every generator needs to obtain an identification (ID) number [8].

What is an Identification Number?

The ID number identifies each handler on hazardous waste manifests and other paperwork. The ID number allows regulators and generators to track the waste from its origin to final disposal ("cradle to grave"). These numbers are business-specific and there must be only one number for a specific location. Each jewelry manufacturing business is a separate generator and must have its own ID number.

How do I get an Identification Number?

Generators of more than 220 pounds (100 kg) of waste regulated under the federal Resource Conservation and Recovery Act (RCRA) need to contact the U.S. Environmental Protection Agency (EPA) at (415) 395-8895 for a federally issued EPA ID number (see [Duty Officers Fact Sheet for EPA ID Numbers](#) available at www.dtsc.ca.gov/PublicationsForms/epa-id-nos-9-00.pdf). To help you determine whether you generate a federally regulated waste, contact U.S. EPA Region IX at

415- 495-8895.

Generators of hazardous waste that do not need a federal EPA ID number should contact DTSC at 800-61-TOXIC (800-618-6942) to obtain a State ID number. (Out of state callers should call (916) 255-1136.) There is no cost to obtain an ID number; however, an annual verification fee is assessed to generators with 50 or more employees.

How long may I accumulate my hazardous waste?

If you generate less than 1,000 kg (2,200 pounds) of hazardous waste per month, then your waste needs to be transported within 180 days of the date the waste was first placed in a container [9].

If you generate more than 1,000 kg (2,200 pounds) of hazardous waste per month, then your waste needs to be transported within 90 days of the date the waste was first placed in a container [10].

Regardless of how much hazardous waste a generator produces per month, if the total amount accumulated at any one time exceeds 6,000 kg (13,200 pounds), or more than one kilogram of acutely or extremely hazardous waste, then your waste needs to be transported within 90 days of the date the waste was first placed in a container [11]. By regulation, cyanide is presumed to be an extremely hazardous waste.

A generator may accumulate up to 55 gallons of hazardous waste (or one quart of acutely or extremely hazardous waste) without a permit at the initial point of accumulation, known as a satellite accumulation area, for up to one year. No treatment of hazardous waste is allowed while the waste is being accumulated in the satellite accumulation area. Within three days after the 55-gallon (or one quart) accumulation limit is reached, the generator must move the container to a "90-day" accumulation area and label the container with the date the satellite accumulation limit is reached [12].

How can I properly accumulate my hazardous waste?

All hazardous waste must be accumulated in a tank or container. All tanks or containers must be clearly marked with the words "Hazardous Waste."

Each container must be labeled with the following information [13]:

- Description of the hazardous waste (example: cyanide);
- The date the first waste was placed into the container;
- The hazards associated with the waste (ignitable, corrosive, toxic or reactive); and
- Name and address of the generator.

How can I properly manage my containers of hazardous wastes?

- Accumulate wastes in compatible, sturdy, leak-proof, closed containers [14].
- All containers must be visible for inspections and you must inspect them weekly [15].
- Do not place incompatible wastes in the same container [16].
- Keep containers holding incompatible wastes separated [17]. Cyanide-containing and acidic hazardous wastes are incompatible and must be stored in separate areas.

How can I properly manage my tanks of hazardous wastes?

- You must inspect all tanks daily [18].
- All tanks must be properly labeled [19].
- All tanks must be designed to hold hazardous waste and not collapse or leak [20].
- All tanks must have an integrity assessment certified by a professional engineer registered in California [21].
- Most tanks and tank systems must have secondary containment [22]. Secondary containment can include a liner, vault or double-walled tank. Secondary containment needs to be certified by a professional engineer registered in California.

How must I plan for an emergency?

- Maintain a ready supply of fire control equipment, such as fire extinguishers, foam, inert gas or dry chemical [23].
- Have an emergency coordinator on the premises or available to respond to an emergency by reaching the facility quickly [24].
- Post the following information next to the telephone [25]:

- (a) The name and telephone number of the emergency coordinator;
- (b) Location of fire extinguishers and spill control material, and, if present, fire alarm; and
- (c) The telephone number of the fire department, unless the facility has a direct alarm.
- Notify local authorities (fire, police, hospitals, building inspectors) of the hazardous waste generated at your site, and provide a map showing the facility layout and access routes [26].
- Maintain an active communication or alarm system to signal employees in case of an emergency [27].

Business owners that can only accumulate their hazardous waste for 90 days must also prepare and retain a written contingency plan and emergency procedures for dealing with emergencies [28]. The contingency plan shall be designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water. Proper respiratory precautions and use of protective gear should be identified in the contingency plan. All employees must be trained in to implement the contingency plan.

What should I do in an event of an emergency?

- Fire: Call 9-1-1, and if it is safe, attempt to extinguish the fire by using a fire extinguisher.
- Spill: Using appropriate safety precautions, contain the flow of hazardous waste to the extent possible. As soon as is practicable, clean up the hazardous waste and any contaminated materials or soil.
- Fire, explosion, or other release which could threaten human health outside the facility or when the generator has knowledge that a spill has reached surface water: Immediately notify the State Warning Center (using its 24-hour toll free number 800/852-7550).

Do I need to train my employees?

Yes, business owners need to ensure that all employees who handle hazardous wastes are thoroughly familiar with proper waste handling and

emergency procedures, relevant to their day to day responsibilities [29]. Generators that accumulate more than 1,000 kg (2,200 pounds) of extremely hazardous waste per month or more than 1 kg of extremely hazardous waste per month must ensure that their employees successfully complete the training program within six months after employment or assignment to the facility. Employees must not work in unsupervised positions until they have completed the training requirements referenced above. They must also take part in an annual review of the initial training [30].

What should I do with my hazardous waste?

It is illegal to throw hazardous waste away or pour hazardous waste down the sink, in the storm drain, or down the toilet [32]. Each jewelry business must use a DTSC registered transporter to transport hazardous waste to a facility that is approved to treat or dispose of it. The building treatment system can not treat jewelry businesses' hazardous waste unless the building treatment system has been authorized by DTSC. If you treat your hazardous waste at your jewelry manufacturing shop (onsite treatment), you must have approval (permit or grant of authorization) from your local [Certified Unified Program Agency \(CUPA\)](#) or DTSC. DTSC is responsible for both types of approvals if there is no CUPA in your area. If you are authorized and treat your hazardous waste onsite into a nonhazardous waste, it may be disposed of to the sewer upon approval of your local sewer agency.

How should I manage my waste for proper transportation?

Before transporting hazardous waste, always:

- (a) Package, label, and mark all containers in accordance with Department of Transportation (DOT) regulations prior to shipment [33];
- (b) Use a hazardous waste transporter registered with DTSC [34];
- (c) Ensure that your waste is delivered to a permitted facility or legitimate recycler [35]; and
- (d) Use a California Hazardous Waste Manifest, DTSC Form 8022A (1/99) [36].

How do I know if a transporter is registered with DTSC?

To verify a transporter's registration, you can call DTSC at (916) 255-4368 or check DTSC's web page at www.dtsc.ca.gov/HazardousWaste/Trans000.cfm

What is a manifest?

A manifest is the paperwork that accompanies hazardous waste from the point of generation to the point of treatment, storage or disposal.

Where can I get a manifest?

Manifests may be ordered from the Department of General Services, P. O. Box 1015, North Highlands, CA, 95660. For general manifest questions, call DTSC's Generator Information Services Section (GISS) at 1-800-618-6942.

How do I complete a manifest?

- (a) Complete the generator and waste sections and sign the manifest certification according to the instructions on the back of the manifest [37].
- (b) Obtain the handwritten signature of the initial transporter and date of acceptance on the manifest [38].
- (c) Retain two copies, in accordance with the instructions on the manifest [39].
- (d) Keep the generator copy of the manifest and the completed facility copy that is returned to you by the treatment or disposal facility. Keep each completed manifest for three years [40].
- (e) Submit a readable generator copy of each manifest to DTSC within thirty (30) days of each shipment [41].
- (f) If a manifest from another state is used to ship hazardous waste to that state, then submit a legible copy of each manifest used to DTSC within thirty (30) days of each shipment [42].
- (g) Ship waste only to hazardous waste facilities authorized to accept the waste type [43].
- (h) Submit an Exception Report to DTSC if a copy of the manifest signed by the facility operator is not received within 45 days of the date the waste was accepted by the initial transporter [44]. The time to file an exception report is 60 days from the date the waste was

accepted by the initial transporter for generators that can accumulate less than 1,000 kg (2,200 pounds) of extremely hazardous waste per month or less than 1 kg of extremely hazardous waste per month and who meet other specified requirements [45]. The Exception Report shall include a legible copy of the manifest for which the generator does not have confirmation of delivery, and a cover letter explaining the efforts taken by the generator to locate the hazardous waste. Please mail your Exception Reports to DTSC, attention: Generator Information Services Section, 8810 Cal Center Drive, Sacramento, CA 95826.

Do I need to keep any records?

You must keep copies of manifests and exception reports for at least three years [46].

You must keep records of any test results, waste analyses or other waste determination records or information used for at least three years [47].

Generators that accumulate more than 1,000 kg (2,200 pounds) of extremely hazardous waste per month or more than 1 kg of extremely hazardous waste per month must keep records of all personnel training. Training records on current employees must be kept until closure of the site. Training records on former employees must be kept for at least three years from the date the employee last worked at the site [48].

It is recommended that you keep a log of weekly container inspections.

It is recommended that you keep a copy of your Identification (ID) number confirmation letter.

Disclaimer:

This fact sheet is intended to provide guidance for managing hazardous wastes. This fact sheet covers only some of the basic management requirements under the Health and Safety Code and the California Code of Regulations. This document does not replace nor supersede relevant statutes and regulations. This fact sheet was prepared in January 2002 and is based on statutes and regulations in effect at that time. Interested parties should always review the most current statutes and regulations.

References

1. Cal. Code Regs., tit. 22, § 66261.2.
2. Cal. Code Regs., tit. 22, § 66260.10.
3. Cal. Code Regs., tit. 22, ch. 11.
4. Cal. Code Regs., tit. 22, § 66260.11.
5. Cal. Code Regs., tit. 22, § 66265.177
6. Cal. Code Regs., tit. 22, § 66265.51
7. Cal. Code Regs., tit. 22, § 66265.31
8. Cal. Code Regs., tit. 22, § 66262.12
9. Cal. Code Regs., tit. 22, § 66262.34
10. Cal. Code Regs., tit. 22, § 66262.34
11. Cal. Code Regs., tit. 22, § 66262.34
12. Cal. Code Regs., tit. 22, § 66262.34
13. Cal. Code Regs., tit. 22, § 66262.34
14. Cal. Code Regs., tit. 22, § 66265.171
15. Cal. Code Regs., tit. 22, § 66265.174
16. Cal. Code Regs., tit. 22, § 66265.177
17. Cal. Code Regs., tit. 22, § 66265.177
18. Cal. Code Regs., tit. 22, § 66265.195
19. Cal. Code Regs., tit. 22, § 66262.34
20. Cal. Code Regs., tit. 22, § 66265.194
21. Cal. Code Regs., tit. 22, § 66265.192
22. Cal. Code Regs., tit. 22, § 66265.192
23. Cal. Code Regs., tit. 22, § 66265.32,
40 C.F.R., § 265.32
24. Cal. Code Regs., tit. 22, § 66265.55,
40 C.F.R., § 262.34, subd. (d)
25. Cal. Code Regs., tit. 22, § 66262.34,
40 C.F.R., § 262.34, subd. (d)
26. Cal. Code Regs., tit. 22, § 66265.37,
40 C.F.R., § 265.36
27. Cal. Code Regs., tit. 22, § 66265.32,
40 C.F.R., § 265.32
28. Cal. Code Regs., tit. 22, § 66265.51
29. Cal. Code Regs., tit. 22, § 66265.16,
40 C.F.R., § 262.34, subd. (d)
30. Cal. Code Regs., tit. 22, § 66265.16
31. Cal. Code Regs., tit. 22, § 66265.16
32. Health & Saf. Code § 25189.5
33. Cal. Code Regs., tit. 22, § 66262.32
34. Cal. Code Regs., tit. 22, § 66263.17
35. Cal. Code Regs., tit. 22, § 66262.20
36. Cal. Code Regs., tit. 22, § 66262.20
37. Cal. Code Regs., tit. 22, § 66262.23
38. Cal. Code Regs., tit. 22, § 66262.23
39. Cal. Code Regs., tit. 22, § 66262.23
40. Cal. Code Regs., tit. 22, § 66262.40
41. Cal. Code Regs., tit. 22, § 66262.23
42. Health & Saf. Code, § 25160
43. Cal. Code Regs., tit. 22, § 66262.23
44. Cal. Code Regs., tit. 22, § 66262.42
45. Health & Saf. Code, § 25123.3, subd. (h) (2).
46. Cal. Code Regs., tit. 22, § 66262.40
47. Cal. Code Regs., tit. 22, § 66262.40
48. Cal. Code Regs., tit. 22, § 66265.16

**Please direct questions to the DTSC
Office nearest you, or call the regional
Public and Business Liaisons at
(800) 72TOXIC (1-800-728-6942)
or visit www.dtsc.ca.gov**

**DTSC Headquarters - (916) 323-2678
1001 I Street, Sacramento, CA 95812**

**Sacramento Office - (916) 255-3617
8800 Cal Center Drive
Sacramento, CA 95826**

**Berkeley Office - (510) 540-3739
700 Heinz Ave., 2nd Floor
Berkeley, CA 94710**

**Clovis Office - (559) 297-3901
1515 Tollhouse Road
Clovis, CA 93611-0522**

**Glendale Office - (818) 551-2830
1011 North Grandview Avenue
Glendale, CA 94710**

**Cypress Office - (714) 484-5400
5796 Corporate Avenue
Cypress, CA 90630**

**San Diego Office - (619) 278-3734
2878 Camino del Rio South, Suite 402
San Diego, CA 92108-3847**

This fact sheet is also available in Armenian, Spanish, and Vietnamese.

Esta información se encuentra disponible también en armenio, español y vietnamita.

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